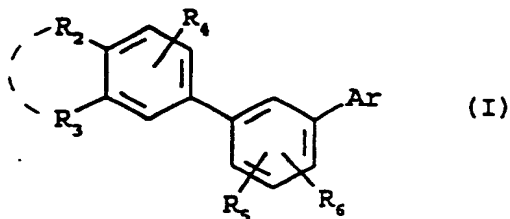


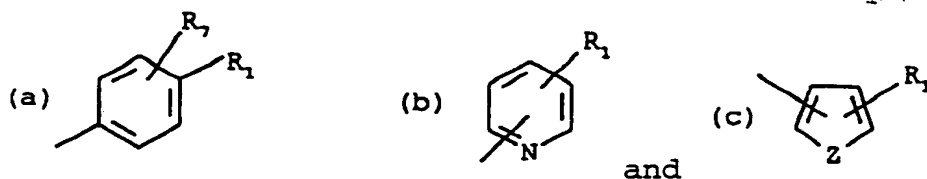
CLAIMS

1. Biphenyl compounds substituted with an aromatic or heteroaromatic radical, characterized in that they  
5 correspond to the general formula (I) below:



in which:

- Ar represents an aromatic or heteroaromatic  
10 radical chosen from:



Z being O or S,

R<sub>1</sub> represents -CH<sub>3</sub>, -CH<sub>2</sub>-OH, -OR<sub>8</sub> or -COR<sub>9</sub>,

- R<sub>2</sub> and R<sub>3</sub>, which may be identical or different,  
15 represent H, linear or branched C<sub>1</sub>-C<sub>15</sub> alkyl, cycloalkyl, -ZR<sub>10</sub> or a polyether radical, at least one from among R<sub>2</sub> and R<sub>3</sub> representing a linear or branched C<sub>1</sub>-C<sub>15</sub> alkyl radical, or

- R<sub>2</sub> and R<sub>3</sub>, taken together, form a 5- or 6-  
20 membered ring, optionally substituted with at least one methyl and/or optionally interrupted by an oxygen or sulphur atom or by an SO or SO<sub>2</sub> radical,

- R<sub>4</sub> represents H, a halogen atom, linear or branched C<sub>1</sub>-C<sub>20</sub> alkyl, -OR<sub>10</sub>, -OCOR<sub>11</sub> or a polyether  
25 radical,

R<sub>5</sub> represents H, a halogen atom, linear or branched C<sub>1</sub>-C<sub>20</sub> alkyl, -OCOR<sub>11</sub>, -OR<sub>12</sub>, mono- or polyhydroxyalkyl, -NO<sub>2</sub>,  $-(CH_2)_n-N \begin{smallmatrix} \nearrow R' \\ \searrow R'' \end{smallmatrix}$ ,  $-(CH_2)_n-NHCOCH_3$ ,

- CH=CH-COR<sub>13</sub>,  $-(CH_2)_nCOR_{13}$ , n being 0 to 6, -O-(CH<sub>2</sub>)<sub>m</sub>COR<sub>13</sub>,  
30 -O-(CH<sub>2</sub>)<sub>m</sub>OH, m being 1 to 12, optionally substituted

aryl, optionally substituted aralkyl, optionally substituted heteroaryl, a polyether radical or a  $-CH_2-$  polyether radical,

$R_6$  represents H, lower alkyl or  $-OR_{10}$ ,

5  $R_7$  represents H, a halogen atom, linear or branched  $C_1-C_{20}$  alkyl,  $-OR_{10}$  or  $-OCOR_{11}$  or a polyether radical,

$R_8$  represents H, lower alkyl or  $-COR_{11}$ ,

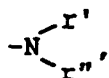
$R_9$  represents H, lower alkyl,  $-OR_{14}$  or  $-N \begin{smallmatrix} r' \\ r'' \end{smallmatrix}$ ,

10  $R_{10}$  represents H or lower alkyl,

$R_{11}$  represents lower alkyl,

$R_{12}$  represents H, linear or branched  $C_1-C_{20}$  alkyl, mono- or polyhydroxyalkyl, or optionally substituted aryl or aralkyl,

15  $R_{13}$  represents H, lower alkyl,  $-OR_{10}$ , aryl or



20  $R_{14}$  represents H, alkyl, linear or branched  $C_1-C_{20}$  alkyl, alkenyl, mono- or polyhydroxyalkyl, optionally substituted aryl or aralkyl, or a sugar residue,

25  $r'$  and  $r''$ , which may be identical or different, represent H, OH, lower alkyl, mono- or polyhydroxyalkyl, optionally substituted aryl, an amino acid residue or a peptide residue, or  $r'$  and  $r''$ , taken together, form a heterocycle,

and the salts of the compounds of formula (I) when  $R_1$  represents a carboxylic acid function, as well as the optical and geometrical isomers of the said compounds of formula (I).

30 2. Compounds according to Claim 1, characterized in that they are in the form of a salt of an alkali metal or alkaline-earth metal, or alternatively of zinc or of an organic amine.

35 3. Compounds according to either of Claims 1 and 2, characterized in that the lower alkyl radical is

chosen from the group consisting of the methyl, ethyl, isopropyl, butyl, tert-butyl and hexyl radicals.

4. Compounds according to any one of the preceding claims, characterized in that the linear or branched alkyl radical, when it is C<sub>1</sub>-C<sub>15</sub>, is chosen from the group consisting of the methyl, ethyl, propyl, 2-ethylhexyl, octyl and dodecyl radicals, and, when it is C<sub>1</sub>-C<sub>20</sub>, is also chosen from the hexadecyl and octadecyl radicals.
5. Compounds according to any one of the preceding claims, characterized in that the monohydroxyalkyl radical is chosen from the group consisting of the hydroxymethyl, 2-hydroxyethyl, 2-hydroxypropyl and 3-hydroxypropyl radicals.
6. Compounds according to any one of the preceding claims, characterized in that the polyhydroxyalkyl radical is chosen from the group consisting of the 2,3-dihydroxypropyl, 2,3,4-trihydroxybutyl and 2,3,4,5-tetrahydroxypentyl radicals and the pentaerythritol residue.
7. Compounds according to any one of the preceding claims, characterized in that the polyether radical is chosen from the group consisting of the methoxymethoxy, methoxyethoxy and methoxyethoxymethoxy radicals.
8. Compounds according to any one of the preceding claims, characterized in that the -CH<sub>2</sub>-polyether radical is chosen from the group consisting of the methoxymethoxymethyl, ethoxymethoxymethyl and methoxyethoxymethoxymethyl radicals.
9. Compounds according to any one of the preceding claims, characterized in that the aryl radical is a phenyl radical optionally substituted with at least one halogen, a hydroxyl, a nitro function, a polyether radical or an amino function optionally protected with an acetyl group or optionally substituted with at least one C<sub>1</sub>-C<sub>6</sub> lower alkyl or alkoxy.
10. Compounds according to any one of the preceding claims, characterized in that the aralkyl radical is chosen from the group consisting of benzyl and

phenethyl radicals optionally substituted with at least one halogen atom, a hydroxyl, a nitro function, a polyether radical or an amino function optionally protected with an acetyl group or optionally substituted with at least one C<sub>1</sub>-C<sub>6</sub> lower alkyl or alkoxy.

11. Compounds according to any one of the preceding claims, characterized in that the heteroaryl radical is chosen from the group consisting of pyridyl, furyl and thienyl radicals, optionally substituted with at least one halogen, a lower alkyl, a hydroxyl, a C<sub>1</sub>-C<sub>3</sub> alkoxy, a nitro function, a polyether radical or an amino function optionally protected with an acetyl group or optionally substituted with at least one C<sub>1</sub>-C<sub>6</sub> lower alkyl or alkoxy.

12. Compounds according to any one of the preceding claims, characterized in that the alkenyl radical is chosen from the group consisting of radicals containing from 2 to 5 carbon atoms and containing one or two ethylenic unsaturation(s), in particular the allyl radical.

13. Compounds according to any one of the preceding claims, characterized in that the sugar residue is chosen from the group consisting of glucose, galactose, mannose and glucuronic acid residues.

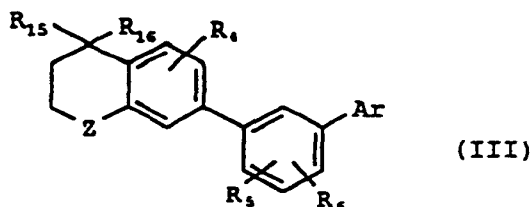
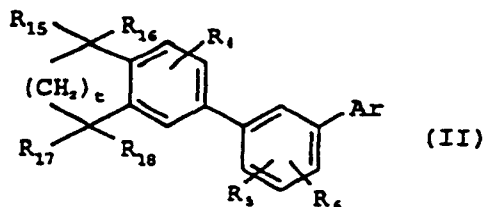
14. Compounds according to any one of the preceding claims, characterized in that the amino acid residue is chosen from the group consisting of residues derived from lysine, from glycine or from aspartic acid.

15. Compounds according to any one of the preceding claims, characterized in that the peptide residue is chosen from the group consisting of dipeptide and tripeptide residues.

16. Compounds according to any one of the preceding claims, characterized in that when r' and r'' form a heterocycle, this is chosen from the group consisting of piperidino, morpholino, pyrrolidino and piperazino radicals, optionally substituted in position 4 with a C<sub>1</sub>-C<sub>6</sub> alkyl or a mono- or polyhydroxyalkyl.

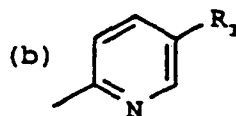
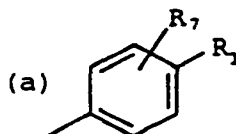
17. Compounds according to any one of the preceding claims, characterized in that the halogen atom is chosen from the group consisting of fluorine, chlorine and bromine.

- 5 18. Compounds according to any one of the preceding claims, characterized in that they correspond to the general formulae (II) and (III) below:



in which:

- 10 Ar represents a radical of formula (a) or (b) below:



R<sub>1</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and Z having the same meanings as those given in Claim 1,

- 15 R<sub>15</sub>, R<sub>16</sub>, R<sub>17</sub> and R<sub>18</sub>, which may be identical or different, represent H or -CH<sub>3</sub>, and  
t is 1 or 2.

19. Compounds according to any one of the preceding claims, characterized in that they are taken from the group consisting of:

- 20 - 4-[4-hydroxy-3-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl)phenyl]benzoic acid, and its methyl ester,  
- 4-[4-(5-hydroxypentyloxy)-3-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl)phenyl]benzoic acid, and its methyl ester,  
25 - 4-[4-(6-hydroxyhexyloxy)-3-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl)phenyl]benzoic acid, and its methyl ester,  
30 - 4-[4-(7-hydroxyheptyloxy)-3-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl)phenyl]benzoic acid,

- 4-[4-(8-hydroxyoctyloxy)-3-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl)phenyl]benzoic acid,
- 5     - 4-[4-(9-hydroxynonyloxy)-3-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl)phenyl]benzoic acid,
- 4-[4-methoxy-3-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl)phenyl]benzoic acid,
- 10    - 4-[4-methoxyethoxymethoxy-3-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl)phenyl]benzoic acid,
- 4-[4-benzyloxy-3-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl)phenyl]benzoic acid,
- 15    - 4'-(2,3-dihydroxypropoxy)-3'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid (racemic),
- 4'-(2,2-dimethyl-[1,3]dioxolan-4-ylmethoxy)-3'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid (racemic),
- 20    - 4'-(2-morpholin-4-yl-ethoxy)-3'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- methyl 2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4"-carboxylate,
- 25    - 2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4"-carboxylic acid,
- 4-methoxymethoxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4"-carboxylic acid,
- 30    - 4-hydroxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4"-carboxylic acid,
- 4-methoxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4"-carboxylic acid,
- 35    - 3-methoxymethoxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4"-carboxylic acid,

- 3-hydroxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxylic acid,
- 5     - 3-methoxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxylic acid,
- 2-methoxymethoxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxylic acid,
- 10     - 2-hydroxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxylic acid,
- 2-methoxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxylic acid,
- 15     - 2'-methoxymethoxy-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 2'-methoxy-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 20     - 2'-propyloxy-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 2'-hydroxy-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 25     - 4'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';2',1'']terphenyl-4''-carboxylic acid,
- 2'-methoxymethoxy-3'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 30     - 2'-hydroxy-3'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 2'-methoxy-3'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 3'-methoxymethoxymethyl-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 35     - 3'-hydroxymethyl-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,

- 2'-(4,4-dimethylthiochroman-7-yl)-  
[1,1';4',1'']terphenyl-4''-carboxylic acid,
- 2'-(4,4-dimethylthiochroman-6-yl)-  
[1,1';4',1'']terphenyl-4''-carboxylic acid,
- 5       - 2'-(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-  
2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxylic acid,
- 2'-(3-methoxymethoxy-5,5,8,8-tetramethyl-  
5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-  
4''-carboxylic acid,
- 10       - 2'-(3-hydroxy-5,5,8,8-tetramethyl-5,6,7,8-  
tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-  
carboxylic acid,
- 2'-(3-methoxy-5,5,8,8-tetramethyl-5,6,7,8-  
tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-  
15 carboxylic acid,
- 2'-(3-propyloxy-5,5,8,8-tetramethyl-5,6,7,8-  
tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-  
carboxylic acid,
- 3''-methyl-2'-(5,5,8,8-tetramethyl-5,6,7,8-  
20 tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-  
carboxylic acid,
- 2''-hydroxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-  
tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-  
carboxylic acid,
- 25       - 2''-methoxymethoxy-2'-(5,5,8,8-tetramethyl-  
5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-  
4''-carboxylic acid,
- 2''-methoxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-  
tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-  
30 carboxylic acid,
- 2''-propyloxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-  
tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-  
carboxylic acid,
- 3''-hydroxy-2'-(5,5,8,8-tetramethyl-5,6,7,8-  
35 tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-  
carboxylic acid,
- 6-[2-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-  
2-naphthyl)biphenyl-4-yl]nicotinic acid,



- 5-[2-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-yl]-2-pyridinecarboxylic acid,
- 2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-hydroxamic acid,
- 5 - 2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-ol,
- [2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-yl]methanol,
- 2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carbaldehyde,
- 10 - 4'-methoxycarbonylmethoxy-3'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 4'-carboxymethoxy-3'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 15 - 4'-(5-ethoxycarbonylpentyloxy)-3'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 4'-(5-carboxypentyloxy)-3'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
- 20 - 2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxamide,
- 25 - N-ethyl-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxamide,
- N,N-diethyl-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxamide,
- 30 - morpholin-4-yl-[2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-yl]methanone,
- (4-hydroxyphenyl)-2'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxamide,
- 35 - 3-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxymethyl-4'-carboxylic acid,

- 3-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4,4'-dicarboxylic acid,
  - 3'-methoxymethoxy-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
  - 3'-methoxy-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
  - 3'-propyloxy-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
  - 3'-hydroxy-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
  - 4'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';3',1'']terphenyl-4''-carboxylic acid,
  - 4'-(5-carboxamidopentyloxy)-3'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
  - 3'-methoxycarbonyl-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
  - 3'-carboxyl-5'-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-carboxylic acid,
  - 2'-(4-hydroxy-5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxylic acid,
  - 2'-(4-methoxy-5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxylic acid,
  - 2'-(4-propyloxy-5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxylic acid,
  - 2'-(4-methoxymethoxy-5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)-[1,1';4',1'']terphenyl-4''-carboxylic acid,
  - 2-[2-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)biphenyl-4-yl]-4-thiophenecarboxylic acid.
20. Compounds according to any one of the preceding claims, for use as a medicinal product.
21. Compounds according to Claim 20, for use as a medicinal product intended for the treatment of

dermatological complaints, dermatological complaints with an inflammatory and/or immunoallergic component of the rheumatic or respiratory type, cardiovascular complaints and ophthalmological disorders.

5 22. Use of at least one of the compounds as defined according to any one of Claims 1 to 19, for the preparation of a medicinal product intended for the treatment of dermatological complaints, dermatological  
10 complaints with an inflammatory and/or immunoallergic component of the rheumatic or respiratory type, cardiovascular complaints and ophthalmological disorders.

23. Pharmaceutical composition, characterized in that it comprises, in a pharmaceutically acceptable  
15 support, at least one compound as defined according to any one of Claims 1 to 19.

24. Composition according to Claim 23, characterized in that the concentration of at least one compound according to one of Claims 1 to 19 is between  
20 0.001% and 5% by weight relative to the total weight of the composition.

25. Cosmetic composition, characterized in that it contains, in a cosmetically acceptable support, at least one compound as defined according to any one of  
25 Claims 1 to 19.

26. Composition according to Claim 25, characterized in that the concentration of at least one compound according to any one of Claims 1 to 19 is between 0.001 and 3% by weight relative to the total  
30 weight of the composition.

27. Use of a cosmetic composition as defined according to either of Claims 25 and 26, for body or hair hygiene.